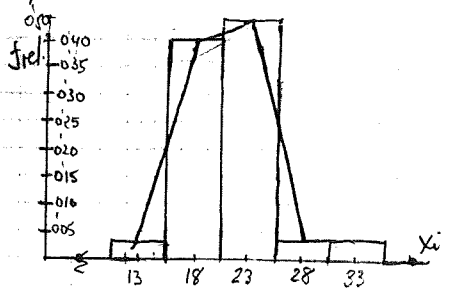
Distribucion de frecuencias de una variable aleatoria continua

Fot(nº11) curso 1987-88

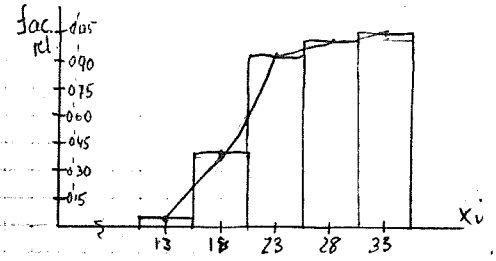
1 – Tabla de distribucion de frecuencias (n=50)

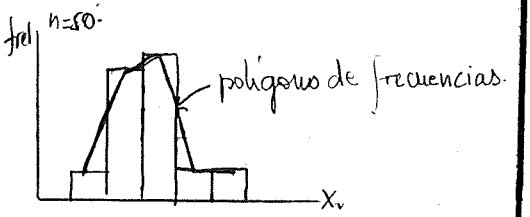
Intervalo real	x_i	fabs.	frel	fac	frelac
11–15	13	2	0'04	2	0'04
16–20	18	20	0'40	22	0'44
21–25	23	24	0'48	46	0'92
26–30	28	2	0'04	48	0'96
31–35	33	2	0'04	50	1'00
		50			

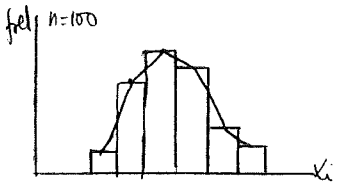
1' – Histograma (frec. relativas)

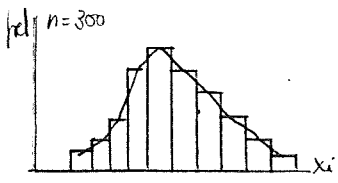


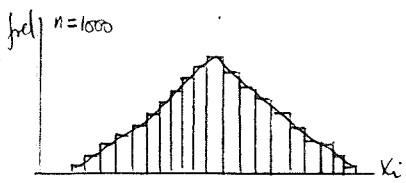
1'' – Ojiva (frec acumuladas)

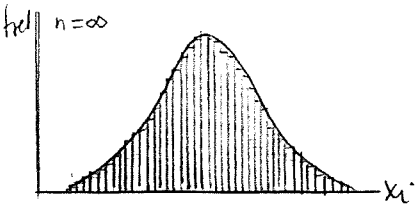








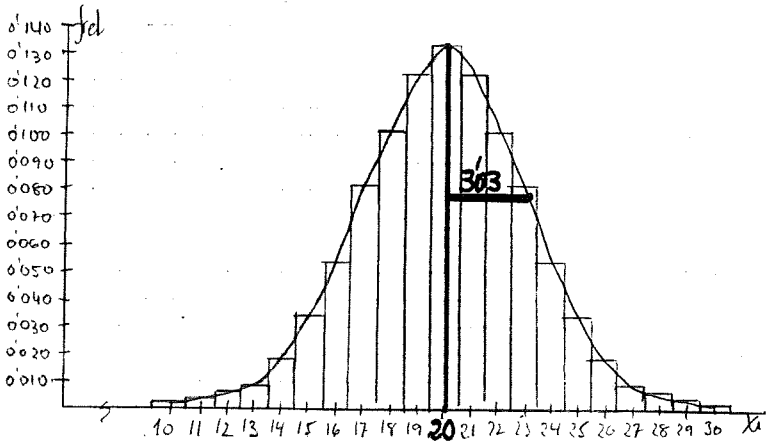




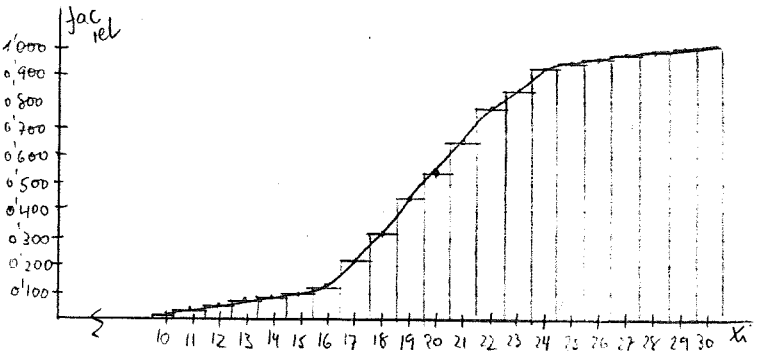
2 – Tabla de distribucion de frecuencias (n=1000)

Intervalo	x_i	fabs	frel	fac	frelac
9'5–10'5	10	1	0'001	1	0'001
10'5–11'5	11	2	0'002	3	0'003
11'5–12'5	12	4	0'004	7	0'007
12'5–13'5	13	9	0'009	16	0'016
13'5–14'5	14	19	0'019	35	0'035
14'5–15'5	15	33	0'033	68	0'068
15'5–16'5	16	54	0'054	122	0'122
16'5–17'5	17	82	0'082	204	0'204
17'5–18'5	18	105	0'105	309	0'309
18'5–19'5	19	124	0'124	433	0'433
19'5–20'5	20	134	0'134	567	0'567
20'5–21'5	21	124	0'124	691	0'691
21'5–22'5	22	105	0'105	796	0'796
22'5–23'5	23	82	0'082	878	0'878
23'5–24'5	24	54	0'054	932	0'932
24'5–25'5	25	33	0'033	965	0'965
25'5–26'5	26	19	0'019	984	0'984
26'5–27'5	27	9	0'009	993	0'993
27'5–28'5	28	4	0'004	997	0'997
28'5–29'5	29	2	0'002	999	0'999
29'5–30'5	30	1	0'001	1000	1'000
		1000			

2' – Histograma (frec relativas)



2'' – Ojiva (frec acumuladas)



$$\mu_A = \frac{\sum_{i=1}^{N} x_i f_i}{N} = \frac{20000}{1000} = 20.$$

$$\sigma_A^2 = \frac{\sum_{i=1}^{N} x_i^2 f_i - (\sum x_i f_i)^2/N}{N} = 9'23$$

$$\sigma_A = 3'03 \qquad CV = 15\%$$